

Notice of Intent (NOI) for coverage under Small MS4 General Permit

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Part I: General Conditions

General Information

Name of Municipality or Organization: Worcester State University State MA

EPA NPDES Permit Number: MAR042022

Primary MS4 Program Manager Contact Information

Name: Robert Daniels Title: Associate Director of Facilities

Street Address Line 1 486 Chandler Street

Street Address Line 2

City Worcester State MA Zip Code 01602

Email: rdaniels@worchester.edu Phone Number: (508) 929-8099

Fax Number:

Other Information

☒ Check the box if your municipality or organization was covered under the 2003 MS4 General Permit

Stormwater Management Program (SWMP) Location (web address or physical location): http://worchester.edu/green

Eligibility Determination

Endangered Species Act (ESA) Determination Complete? Yes

Eligibility Criteria (check all that apply): ☐ A ☐ B ☒ C ☐ D ☐ E ☐ F

National Historic Preservation Act (NHPA) Determination Complete? Yes

Eligibility Criteria (check all that apply): ☐ A ☒ B ☐ C ☐ D

MS4 Infrastructure (if covered under the 2003 permit)

Estimated Percent of Outfall Map Complete? 100% If 100% of 2003 requirements not met, enter an estimated date of completion (MM/DD/YY):

Web address where MS4 map is published: http://worchester.edu/green (SITE UNDER CONSTRUCTION)

If outfall map is unavailable on the internet an electronic or paper copy of the outfall map must be included with NOI submission (see section V for submission options)

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted?: Yes Effective Date or Estimated Date of Adoption (MM/DD/YY): 10/24/05

Construction/Erosion and Sediment Control (ESC) Authority Adopted?: Yes Effective Date or Estimated Date of Adoption (MM/DD/YY): 10/24/05

Post- Construction Stormwater Management Adopted?: Yes Effective Date or Estimated Date of Adoption (MM/DD/YY): 10/24/05

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)

Part II: Summary of Receiving Waters

Please list the waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments.

For Massachusetts list of impaired waters click here: [Massachusetts 2010 List of Impaired Waters](http://www.mass.gov/dep/water/resources/10list6.pdf) <http://www.mass.gov/dep/water/resources/10list6.pdf>

For New Hampshire list of impaired waters click here: [New Hampshire Final 303\(d\) Materials](http://des.nh.gov/organization/divisions/water/wmb/swqa/2010/index.htm): <http://des.nh.gov/organization/divisions/water/wmb/swqa/2010/index.htm>

Source of pollutants column should be completed with a preliminary source evaluation of pollutants for discharges to impaired waterbodies (see above 303(d) lists) without an approved TMDL in accordance with Section 2.2.2a of the permit

Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment	Pollutant list (select one at a time to add)	Click impairment at left to add, or at right to remove	Pollutant(s) causing impairment, if applicable (select one at a time to remove)
Moore Brook	4	Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
City of Worcester MS4	2	Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	

[illegible]

		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	
		Chlorophyll-a Dissolved oxygen saturation Escherichia coli Mercury Nitrogen (Total) Oxygen, Dissolved pH	Add/Remove	

Click to lengthen table

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)

Part III: Stormwater Management Program Summary

Identify the Best Management Practices (BMPs) that will be employed to address each of the six Minimum Control Measures (MCMs). For municipalities/organizations whose MS4 discharges into a receiving water with an approved Total Maximum Daily Load (TMDL) and applicable waste load allocation (WLA), identify any additional BMPs employed to specifically support the achievement of the WLA in the TMDL section at the end of Part III.

For each MCM list each existing or proposed BMP by category and provide a brief description, responsible parties/departments, measurable goals and the year the BMP will be employed (Public education and outreach BMPs also requires a target audience). **Use the drop-down menus in each table or enter your own text to override the drop down menu**

MCM 1: Public Education and Outreach

BMP Media/Category (enter your own text to override the drop down menu)	BMP Description	Targeted Audience	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal	Beginning Year of BMP implementation
Brochures/Pamphlets	City of Worcester information is available to students and faculty online, which cover stormwater management tips.	Students and Faculty	Bob Daniels	Online availability	2005
Web Page	Construction of a web page on the WSU web site so that students, faculty, employees, and contractors can read about specific BMPs that are being implemented to help prevent contamination of stormwater on campus is underway. Students and faculty will be invited to participate in campus clean-ups through web-site announcements. WSU will post the EPA pamphlet, "After the Storm", on the web site.	Students and Faculty	Bob Daniels	Launching site in 201	2017
Brochures/Pamphlets	Create and distribute pamphlet for contractors	Contractors	Bob Daniels	Amount of contractor incidents	2006
0	0	0	0	0	0
0	0	0	0	0	0
Special Events/Festivals/Fairs	Participation at the annual WSU Sustainability fair	Students and Faculty	Bob Daniels	Increased awareness and better community relations	2011

[illegible]

Part III: Stormwater Management Program Summary

MCM 2: Public Involvement and Participation

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)**Part III: Stormwater Management Program Summary****MCM 3: Illicit Discharge Detection and Elimination (IDDE)**

BMP Categorization (enter your own text to override the drop down menu)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
SW Utility Review	Stormwater Utility Map	Bob Daniels	An update and maintain storm sewer plan
IDDE Plan - In-stream Monitoring (Dry Weather)	Checklist to detect illicit discharges	Bob Daniels	WSU will conduct dry weather inspections semiannually
IDDE Plan - Septic System Inspection Program	Checklist to report illicit discharges	Bob Daniels	Use the form for each illicit discharge discovered
Outfall Prioritization	Determine the outfalls with the greatest potential for a discharge	Bob Daniels	Rank stormwater outfalls by where a potential discharge is likely to occur

MCM 4: Construction Site Stormwater Runoff Control

[illegible]

Part III: Stormwater Management Program Summary

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

[illegible]

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)**Part III: Stormwater Management Program Summary****MCM 6: Municipal Good Housekeeping and Pollution Prevention**

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/ Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP implemen tation
Training	Develop pollution prevention training	Bob Daniels	Annually review and revise training for maintenance and grounds keepers, and contractors (e.g., snow removal, plumbers). Provide annual updates to the training program for new stormwater concerns and new employees. Provide information about the Illicit Discharge Detection and Elimination program and how to recognize illicit discharges	2007
	0	0		0
Procedures	Proper loading procedures are followed when deliveries are made to generator tanks	Bob Daniels	Reduction of oil spill potential	2003
Procedures	Proper procedures were developed and implemented for loading docks	Bob Daniels	Reduction of contamination during loading dock operations	2003
Inspections	Regular inspections of all SPCC locations	Bob Daniels	Reduction of oil spill potential	2003
	0	0	0	0
Inspections	Regular inspections and clean up of dumpster/ compactor areas	Bob Daniels	Less potential for pollution from debris and increased ability to detect and discharges	2008
				0
				0
				0
				0

[illegible]

Actions for meeting Total Maximum Daily Load (TMDL) Requirements

Use the drop-down menus to select the best categorization of your BMP and responsible party. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

[illegible]

Actions for meeting Requirements Related to water Quality Limited Waters

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)**Part IV: Notes and additional information**

Use the space below to provide any additional information about your MS4 program

Some parts of the form required that data be entered in order to print. Where there was nothing to populate those areas, 0 (zero) was added as a placeholder.

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)**Part V: Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

KATHLEEN EICHEL ROTH

Title:

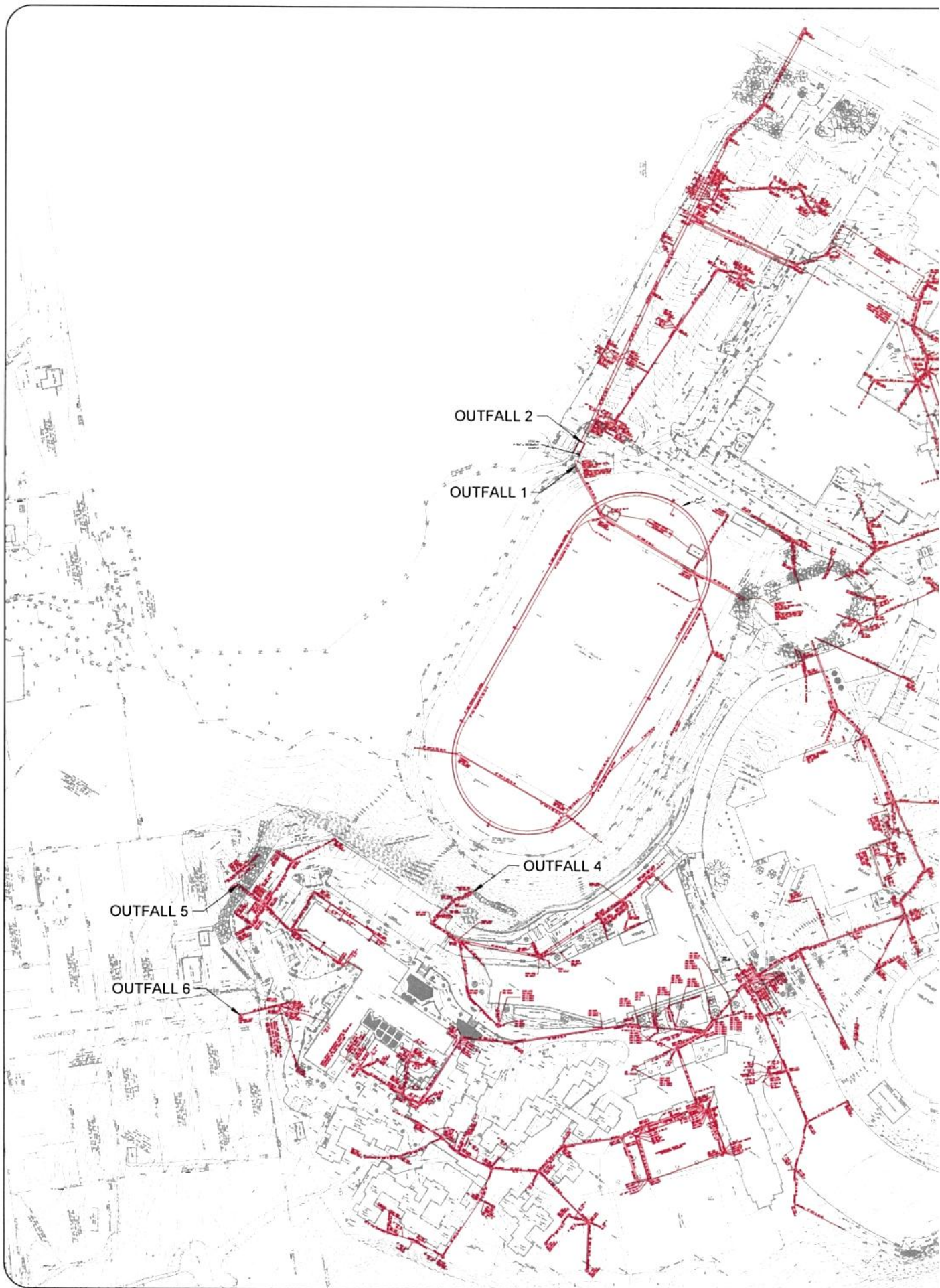
V.P. ADMIN + FINANCE

Signature Field



Date:

08/31/18





NOTES

1. ALL BUILDINGS, SITE PLAN DATA, LAND FEATURES, PROCESSES AND UTILITIES DEVELOPED FROM PLANS SUPPLIED BY CLIENT.
2. ALL EXISTING AND/OR PROPOSED UTILITIES SHOWN ON PLANS ARE APPROXIMATE IN LOCATION AND TYPE BASED ON FIELD OBSERVATIONS MADE BY CAPACCIO ENVIRONMENTAL ENGINEERING, INC.

B	Outfall Labeling	DSA	LS		01-17-17
A	Initial Release	DSA	LS		01-27-16
-	Created	DSA	LS		01-27-17
REV	DESCRIPTION	DRW	CHK	ENG	DATE

PROJECT TITLE

Stormwater Management Plan

DRAWING TITLE

Site Map

CLIENT

Worcester State University

JOB LOCATION

486 Chandler Street
Worcester, MA 01602

NORTH
①

Capaccio
Environmental Engineering, Inc.
293 Boston Post Road-West
Marlborough, MA 01752
(508) 970-0033 * www.capaccio.com
"Helping Industry and the Environment Prosper"
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JOB NUMBER
02-063

SCALE
1" = 80'-0"

SIZE
D

SHEET

R2-300

October 31, 2018

Michelle Vuto
U.S. EPA Region 1
5 Post Office Square-OEP06-4
Boston, MA 02109-3912

RE: Small MS4 NOI Submission - Additional or Corrected Information

Dear Michelle:

Worcester State University (WSU) recently submitted a Notice of Intent (NOI) to the US Environmental Protection Agency (EPA) for coverage under the small Municipal Separate Storm Sewer System (MS4). On October 4, 2018 the EPA contacted WSU and Capaccio Environmental Engineering (CAPACCIO) to request additional information to complete the NOI submission process. WSU has worked with CAPACCIO to gather the additional information requested and has summarized the response here in this letter. Find below bullets with each piece of information requested and the response in **Bold**.

- ESA – Species: Please provide a statement that your planned discharge activities will not adversely affect the endangered species present.
 - **WSU consulted the US Division of Fish and Wildlife in 2016 when the MS4 permit was initially released and determined that planned SW discharges will not adversely affect any endangered or threatened species.**
- Receiving Waters: Please estimate which receiving waters your system discharges to once it passes through the City of Worcester's MS4.
 - **The stormwater from Worcester State University outfall 6 flows into the City of Worcester MS4 and down Candlewood Street to Chicopee Street. Per the City of Worcester GIS Mapping and stormwater management plan, the outfall for Chicopee street flows into Patch Reservoir, which is upstream of Patch Pond, Patch Pond is the receiving waters of Moore Brook. Moore Brook is the receiving water for the other WSU outfalls, including outfall 3 which flows into the City MS4 then from the City MS4 into Moore Brook.**
- Public Ed: Please include a second message for Contractors
 - **Contractors are directed to review information created and provided by the city of Worcester department of public works, several of these pamphlets are made available in the WSU EHS office. The topics in this pamphlet provide information about, but not limited to: quality of Worcester's water resources, stopping pollution of waterways, and oil collection and recycling. WSU also plans to provide a link to the City of Worcester's stormwater information website.**
- IDDE: Please include all IDDE BMPs to follow permit requirements (e.g. SSO inventory, implement IDDE program, employee training, conduct wet weather screening, ongoing screening). See <https://www3.epa.gov/region1/npdes/stormwater/ma/2016fpd/appendix-e-2016-ma-sms4-gp.pdf> for examples. Please include a beginning year of implementation for each BMP.
 - **SSO Inventory: As required by the General Permit, WSU evaluates potential non-stormwater discharges, including sanitary wastewater, by utilizing visual inspections and plan schematic reviews periodically. Any SSO would be eliminated as soon as possible and documented as required by the permit, then an SSO inventory would be**

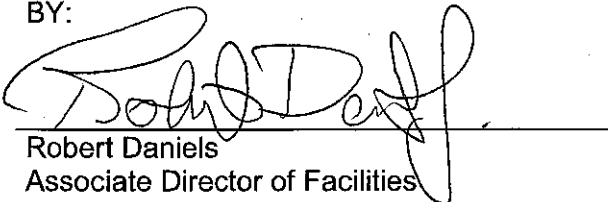
created and maintained as such. It is important to note that WSU does not have any common storm and sanitary structures or systems, or any history of SSOs.

- **Written Program:** A written Illicit Discharge Detection and Elimination plan consists of several of the following BMPs noted in the WSU SWMP, including but not limited to: outfall prioritization, a storm and sewer site plan, a checklist for the detection of and inspection for illicit discharges via dry weather screening at catch basins, a reporting form in case an illicit discharge is detected, updating the outfall priority based on inspections, and the isolation and removal of any illicit discharges detected. This plan is implemented as evidenced by the BMPs listed in the SWMP.
- **Training:** Training is provided on an annual basis. The training program is designed to train personnel, at all levels of responsibility, to the components and goals of the WSU SWMP and to develop sensitivity to stormwater pollution prevention concerns, including the topic of Illicit Discharge Detection and Elimination.
- **Dry weather screening:** IDDE screening is conducted semi-annually. This screening is conducted in dry weather conditions.
- **Wet weather screening:** there are no catchments, or outfall drainage area, with a system vulnerability factor or junction manholes at WSU, therefore no wet weather screening is required
- **Construction:** Please include a waste control BMP. Also, please clarify that an erosion and sediment control program will be implemented
 - **Waste Control:** Waste control issues with construction contractors are covered in the pamphlet that is provided to construction contractors
 - **Erosion and Sediment Program:** An erosion and sediment program is developed and implemented, it consists of several of the following BMPs including but not limited to: WSU personnel training, meetings with contractors to discuss SW impacts and controls before and during construction, contractor SW information pamphlets, periodic construction site inspection against any SW permits or Stormwater Plans developed for specific construction projects, and an enforcement strategy when construction inspections and BMPs are not implemented and sediment and erosion control is identified. This plan is implemented as evidenced by the BMPs listed in the SWMP
- **Post Construction:** Please include all Post-Construction BMPs according to the permit (e.g. as-built plans for on-site stormwater control, targeting properties to reduce impervious areas, street design and parking lot guidelines, and ensure any stormwater controls or management practices for new development and redevelopment meet the retention or treatment requirements of the permit and all applicable requirements of the Massachusetts Stormwater Handbook.)
 - **As built:** After construction, as built plans for any SW controls will be submitted to WSU to ensure long term operation and maintenance will be a part of the SWMP.
 - **Reduce impervious areas, Green infrastructure, street and parking lot design:** WSU recently completed construction of the new wellness center, SW drainage from the building roof is collected and used as irrigation water. In future construction, development, redevelopment road, and parking lot design and construction projects, impervious surface reduction and green infrastructure potential will be reviewed.
 - **SW plan for development and redevelopment:** all contractors employed by WSU design all SW controls to meet the Mass SW handbook standards

- **Good Housekeeping:** Please include all Good Housekeeping and Pollution Prevention BMPs according to the permit (e.g. O&M procedures; inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment; Infrastructure O&M; SWPPP; Catch basin cleaning; street sweeping program)
 - **O and M: Parks, building, and vehicles:** Per normal facility operations, inventories and O and M procedures have been developed for the campus open spaces, buildings, and vehicles. These inventories and procedures are maintained and updated by facilities, grounds keeping, EHS, or other relevant departments
 - **O and M: infrastructure:** WSU currently has a plan developed for the maintenance of SW infrastructure including street sweeping annually in spring, clean out catch basins, Vortech units, Stormceptor units, and Level Spreader at least annually
 - **SWMP:** WSU developed a stormwater management plan for the 2003 MS4 permit and has maintained and revised it per the 2016 MS4 permit requirements, it will be available online
 - **Catch Basin Cleaning:** Catch basins are cleaned out on an annual basis or as needed. WSU no longer uses sand during winter months, they only use ice melt such as salt to reduce sediment.
 - **Street Sweeping:** Street sweeping is performed annually to clean-up sand from the roads/walkways each spring to minimize sand run-off from reaching the catch basins and the campus stormwater retention pond. WSU no longer uses sand during winter months, they only use ice melt such as salt to reduce sediment.

If additional information is required, please contact myself or CAPACCIO via email at daverill@capaccio.com.

Sincerely,
Worcester State University.
BY:


Robert Daniels
Associate Director of Facilities

C: MF: 02-063.036 (CAPACCIO)

From: [David Averill](#)
To: [Vuto, Michelle](#)
Subject: RE: WSU NOI Additional Information
Date: Friday, November 16, 2018 3:25:21 PM
Attachments: [MCM3-MCM6_re_Nov 2018.pdf](#)

Hi Michelle,

The BMPs in MCM3-6 are all completed by Bob Daniels. I have attached the PDF with the years of implementation. Most BMPs were implemented before the release of the 2015 MSGP, and some others were implemented right after the permits release ahead of the permit effective date.

I have some specific notes though:

- SSO inventory: WSU has not had any SSOs in its history so no inventory can be created. An inventory will be created immediately in the case of an SSO event
- Wet weather screening: No wet weather screening is required as there are no SVFs or junction manholes at the various catchments at WSU
- Contractor Brochure/Pamphlet: public education via pamphlet distribution to contractors began in 2006

I hope that covers things, if it does not please don't hesitate to email or call. 774-245-9408.

Have a nice weekend and happy Thanksgiving!

-Dave

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary *(continued)*

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP Categorization (enter your own text to override the drop down menu)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Implementation
SSO inventory	Develop SSO inventory in accordance of permit conditions		Complete within 1 year of effective date of permit	NA
Storm sewer system map	Create map and update during IDDE program completion		Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	2016
Written IDDE program	Create written IDDE program		Complete within 1 year of the effective date of permit and update as required	2008
Implement IDDE program	Implement catchment investigations according to program and permit conditions		Complete 10 years after effective date of permit	2008
Employee training	Train employees on IDDE implementation		Train annually	2005
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions		Complete 3 years after effective date of permit	2005
Conduct wet weather screening	Conduct in accordance with outfall screening procedure		Complete 10 years after effective date of permit	NA
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)		Complete ongoing outfall screening upon completion of IDDE program	2005

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary *(continued)*

MCM 4: Construction Site Stormwater Runoff Control

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Implementation
Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures		Complete within 1 year of the effective date of permit	2007
Site plan review	Complete written procedures of site plan review and begin implementation		Complete within 1 year of the effective date of permit	2005
Erosion and Sediment Control	Adoption of requirements for construction operators to implement a sediment and erosion control program		Complete within 1 year of the effective date of permit	2006
Waste Control	Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes		Complete within 1 year of the effective date of permit	2006

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Implementation
As-built plans for on-site stormwater control	The procedures to require submission of as-built drawings and ensure long term operation and maintenance will be a part of the SWMP		Require submission of as-built plans for completed projects	2015
Target properties to reduce impervious areas	Identify at least 5 permittee-owned properties that could be modified or retrofitted with BMPs to reduce impervious areas and update annually		Complete 4 years after effective date of permit and report annually on retrofitted properties	2018
Allow green infrastructure	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist		Complete 4 years after effective date of permit and implement recommendations of report	2016
Street design and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options.		Complete 4 years after effective date of permit and implement recommendations of report	2016

[illegible]

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 6: Municipal Good Housekeeping and Pollution Prevention

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Implementation
O&M procedures	Create written O&M procedures including all requirements contained in 2.3.7.a.ii for parks and open spaces, buildings and facilities, and vehicles and equipment		Complete and implement 2 years after effective date of permit	2005
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory		Complete 2 years after effective date of permit and implement annually	2005
Infrastructure O&M	Establish and implement program for repair and rehabilitation of MS4 infrastructure		Complete 2 years after effective date of permit	2003
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for maintenance garages, transfer stations, and other waste-handling facilities		Complete and implement 2 years after effective date of permit	2005
Catch basin cleaning	Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full and clean catch basins on that schedule		Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually	2003
Street sweeping program	Sweep all streets and permittee-owned parking lots in accordance with permit conditions		Sweep all streets and permittee-owned parking lots once per year in the spring	2005
Road salt use optimization program	Establish and implement a program to minimize the use of road salt		Implement salt use optimization during deicing season	2015

[illegible]